STANDARDS PRESENTATION TO

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD, TITLE 8, CHAPTER 4

Amend Section 4324 to read:

§4324. Exhaust Dust Collection Systems.

- (a) <u>Use of dust collection systems for the removal of wood dust and chips produced by woodworking</u> machines shall conform to this section.
- (1) Suitable exhaust dust collection systems shall be required whenever the chips and sawdust wood dust produced by woodworking machines accumulate on the floor so as to endanger employees.

 Note: Additional requirements for all mechanical ventilation systems are contained in Section 5143.

 (b) Definitions.
- (1) <u>Dust Collection System</u>. An exhaust system that is designed to capture wood dust, chips and other wood particulates at the point of generation, usually from multiple sources, and to convey the material to a point of consolidation. A dust collection system includes the collection hood, the exhaust fan, the dust collector, and all ducts, flexible hoses or other devices used for conveying the material.
- (2) <u>Dust Collector</u>. The part of the dust collection system where the material is separated from the air stream and consolidated. Dust collectors include conventional solid-walled cyclones and baghouses, and enclosureless bag-type units.
- (3) Enclosureless Bag-Type Dust Collector. A dust collector that possess all of the following characteristics:
- (A) The filtration is accomplished by passing dust-laden air through filter media, collecting the dust on the inside of the filter media, and allowing cleaned air to exit to the surrounding area.
- (B) The filter medium is not enclosed in a solid-walled container.
- (C) The filter medium is hand shaken, not mechanically shaken or pressure-pulsed.
- (D) The filter medium is under positive pressure.
- (E) Removal of the collected dust is not continuous or mechanical.
- (c) <u>Location of dust collectors</u>. <u>Dust collectors having a maximum air-handling capacity greater than 500 cubic feet per minute (cfm) shall be located in accordance with one of the following:</u>
- (1) Outdoors.
- (2) In detached rooms of fire-resistant construction and provided with adequate explosion vents.
- (3) Inside of buildings provided that the collectors are liquid-spray type collectors.
- (4) <u>Inside of buildings provided that the collectors are enclosureless bag-type dust collectors that meet</u> all the following criteria:
- (A) The collector is used only for dust pickup from woodworking or wood processing machinery (i.e., no metal grinders, painting and finishing operations, or other operations that may increase the risk of fire or explosion).
- (B) The collector is not used on sanders or abrasive planers having mechanical feeds.
- EXCEPTION: Mechanically fed abrasive sanders and abrasive planers that meet all of the following conditions:
 - 1. No more than one abrasive sander or abrasive planer is connected to the same enclosureless bag-type dust collector, and

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- 2. The sander or planer is equipped with a cut limiting device that is set to prevent stock from being fed into the sander or planer if the thickness of the stock would cause the machine to make a cut that is deeper than can be safely accomplished without causing excessive friction and without causing burning of the wood and wood dust, and
- 3. The sander or planer is equipped with an emergency shutoff for operator use that shuts off the mechanical feed and the abrasive belt. The abrasive belt shall be equipped with a brake that stops the belt when the emergency shutoff is activated.
- 4. The machine operator shall hand feed stock into the mechanical feed and shall visually inspect the stock for any metal objects which shall be removed before feeding the stock into the machine. The operator shall be in close proximity to the machine to monitor the operation and activate the emergency stop when necessary.
- (C) Each collector has a maximum air-handling capacity of 5000 cfm or less.
- (D) The fan motor is of a totally enclosed, fan-cooled design.
- (E) The collected dust is removed daily or more frequently if necessary to ensure effective operation.
- (F) The collector is located at least 20 feet from the nearest emergency egress route.
- EXCEPTION: One enclosureless bag-type dust collector with a maximum air-handling capacity of 1500 cfm may be located within 20 feet of an emergency egress route provided that it is not within 10 feet of an emergency exit.
- (G) The collector is located at least 20 feet from the nearest employee work station.
- EXCEPTION: One enclosureless bag-type dust collector with a maximum air-handling capacity of 1500 cfm may be located within 20 feet of the nearest employee workstation.
- (H) Multiple collectors in the same room are separated from each other by at least 20 ft.
- EXCEPTION: A maximum of two enclosureless bag-type dust collectors may be located within 20 feet of each other in the same room provided that each collector has a maximum air-handling capacity of 1500 cfm or less.
- (d) Bonding and grounding of ducts. Ducts and flexible hoses used to convey air and material as part of dust collection systems shall be constructed of metal or other conductive material and shall be bonded and grounded to prevent the accumulation of static electricity generated by the airflow. Nonconductive ducts such as PVC pipes shall not be permitted.
- EXCEPTION: Nonconductive flexible ducts and hoses may be used for final machine connection in a length not exceeding the minimum required for machine operation provided that bonding to ground is maintained.
- (b)(e) Guards and collection hoods. Where an exhaust dust collection system is used the guard shall form part or all of the exhaust collection hood and shall be constructed of a suitable solid material of a thickness not less than that specified in Section 3943.
- (e)(f) Removal of other refuse. Provision for the removal of refuse shall be made in all operations not required to have an exhaust system or having refuse too heavy, bulky, or otherwise unsuitable to be handled by the exhaust dust collection system.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.